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The Topes de Collantes Sanatorium: A Look at the Global Sanatorium Movement, the Climate Cure Theory, and How Tuberculosis Influenced Modern Architecture

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This paper won the 2020-2021 Undergraduate Writing Prize Department of History

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The Topes de Collantes Sanatorium: A Look at the Global Sanatorium Movement, the Climate Cure Theory, and How Tuberculosis Influenced Modern Architecture

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Abstract

The Topes de Collantes Sanatorium in Cuba was constructed during a time in medical history when it was commonly believed that a specific climate played a strong role in tuberculosis treatment. My research paper addresses how the so-called “Climate Cure” theory spread throughout the Western hemisphere and influenced the construction of sleek, modern tuberculosis sanatoriums. Previous research and scholarship have looked at major TB sanatoriums in Europe and the United States in depth; however, little has been looked at TB sanatoriums in smaller countries such as Cuba. I seek to fill in this gap of tuberculosis’ history by taking a close look at Cuba’s handling of tuberculosis with the Topes de Collantes Sanatorium as well as what similarities and differences that institution had with other medical facilities and theories abroad. My research will use architectural, medical, and political forms of analysis in looking at how and why the Topes de Collantes Sanatorium in Cuba came to be. Through this, I argue that the project of the Topes de Collantes Sanatorium took after the architecture of other sanatoriums abroad and by medical writings that advocate for the climatic treatment of tuberculosis. This historical argument and research is significant because it delves into why and how different countries, governments, architects, and medical professionals decided to tackle tuberculosis through a new take on modern architecture and an emphasis on the natural environment.

Introduction

When walking through the Topes de Collantes nature preserve near Trinidad, Cuba, one comes across a large modern complex situated at the top of a hill. Surrounded by expansive views of the Cuban landscape and lush greenery, this building appears

almost as if it is in the wrong place and time. Currently operating as a hotel and visitor's center, this building was first constructed with the hopes of being Cuba's premiere tuberculosis facility: the Topes de Collantes Sanatorium. Construction began in 1936, a time in medical history where it was popularly believed that one of the best places for treating tuberculosis was in an outdoor environment with access to clean, fresh air, ample sunlight, and a steady moderate temperature.¹ In response, grand, modern medical institutions specializing in tuberculosis climate treatment began to pop up across the United States, Europe, and elsewhere, including Cuba. This paper looks at the architectural and theoretical similarities that Cuba's Topes de Collantes Sanatorium has in common with other sanatoria in the United States and Europe. The goal of this research is to highlight the many connections within the sanatorium movement and the primary principles and beliefs that led the way to the movement's popularity. In doing this, I argue that the project of Topes de Collantes Sanatorium was inspired by the architecture of other sanatoriums abroad and by writings that emphasized the positive treatment of TB in specific climate environments. I support this central argument with a close look at the physical makeup of the Topes de Collantes Sanatorium in Cuba compared with the Ottari Sanatorium in Asheville, North Carolina and the Paimio Sanatorium in Finland. I also look at popular twentieth-century modern architecture writings as well as the medical writings of J.W. Trask and Burt Shurly to explain the beliefs held at the time that architecture and the natural landscape could help cure those suffering from tuberculosis.

Historical Background

The idea for the Topes de Collantes Sanatorium can be traced back to one person with great political power in Cuba during the mid-twentieth century: Fulgencio Batista. Batista was the president of Cuba from 1940-44; however, his influence and role in politics goes back much earlier. Batista's first step towards the eventual Topes de Collantes Sanatorium was in 1936, when Batista, who was in charge of the Cuban military and de facto ruler at the time, established the National Tuberculosis Council (CNT).² The goal of the CNT and Batista was to appeal to the people of Cuba by showing them that their administration was doing the best they could to

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- 1 John W. Trask, "Climate and Tuberculosis: The Relation of Climate to Recovery," *Public Health Reports (1896-1970)* 32, no. 8 (February 23, 1917): 318-24, <https://doi.org/10.2307/4574446>.
 - 2 Kelly Urban, "Plagued by Politics: Cuba's National Sanatorium Project, 1936-59," *Bulletin of the History of Medicine* 91, no. 4 (Winter 2017): 772.

eliminate tuberculosis on the island. This populist approach came at a time when TB was ravaging through Cuba, affecting all members of society and not discriminating in regard to race, gender, or class. By the beginning of the twentieth century, tuberculosis contributed 17 percent of the country's total deaths reported.³ Batista and his administration knew this was one of the country's biggest problems of the time and had to act on it for them to remain in the people's favor.

In combatting tuberculosis, Batista's actions and agenda were more politically based than scientific. Seeing TB as a way to keep political control, Batista used his authoritative power to appoint members to the CNT that were allies of his and would advance his political initiatives in dealing with tuberculosis.⁴ With his military men and allies by his side, Batista was ready to accomplish the biggest item on his tuberculosis agenda: the start of construction on the Topes de Collantes Sanatorium in 1937.

Existing Literature & Historiography

When it comes to the Republican period in Cuban history (early to mid-twentieth century), historians have mostly ignored the discussion and analysis of key figures such as Batista and the presence and issues of TB and politics that existed during this time.⁵ Scholars such as Argote-Freyre, Gutiérrez, and Urban have recently delved into these gaps of history and brought about new questions and arguments that address these important topics and themes within Cuban history.

In his work, Fulgencio Batista: *From Revolutionary to Strongman*, Argote-Freyre focuses specifically on the Republican era in Cuba and what can be learned from its own historical value.⁶ Argote-Freyre also works to sift through the politically motivated historical accounts from the time of Batista, with the goal to reinterpret and reanalyze Fulgencio Batista's early years, which often go unnoticed, as most historians characterize Batista by his later years in power. Argote-Freyre achieves this through a personal look at the life of Batista and how his childhood and early adulthood affected his later years in politics. What particularly influences my research

3 John A. Gutiérrez, "An earnest pledge to fight tuberculosis': Tuberculosis, Nation, and Modernity in Cuba, 1899-1908," *Cuban Studies* 45, (2017): 282.

4 Urban, "Plagued by Politics," 775.

5 Refer to Frank Argote-Freyre, "Fulgencio Batista: From Revolutionary to Strongman" (PhD diss., State University of New Jersey- New Brunswick, 2004), 1, ProQuest Dissertations & Theses Global; and Gutiérrez, "An earnest pledge to fight tuberculosis'," 281-282.

6 Argote-Freyre, "Fulgencio Batista," 1-2.

and contributes to the topic of tuberculosis in Cuba is Argote-Freyre's discussion of Batista's relationship with his brothers and the major effects the death of his younger brother from TB had on Batista for the rest of his life.⁷

Gutiérrez's work, "An earnest pledge to fight tuberculosis': Tuberculosis, Nation, and Modernity in Cuba, 1899-1908," examines the antituberculosis movement that occurred before Batista and the CNT in the early twentieth century. Gutiérrez takes a critical approach to this period in Cuban medical history and analyzes how tuberculosis afflicted every sector of Cuban society and not just those with little financial resources or opportunities. Along with evidence and data that supply the reader with information regarding TB deaths in Cuba from 1899-1908, Gutiérrez also provides an analysis of Cuban national identity (*cubanidad*) during this time and how death and disease played a role in shaping the future of Cuba.⁸

The closest secondary source that deals specifically with the Topes de Collantes Sanatorium is Urban's work, "Plagued by Politics: Cuba's National Sanatorium Project, 1936-59." Beginning with the foundation of Batista's National Tuberculosis Council (CNT), Urban provides a comprehensive historical approach to this period of Batista's reign, from the formation of the CNT to the downfall of the Topes de Collantes Sanatorium. Urban touches on many of the aspects of why this sanatorium project became so controversial and faced intense backlash from the Cuban medical community, politicians, and citizens.⁹ This work supplied my research with important facts and key details that shaped my understanding of the Cuban national sanatorium and the role it played in Cuba's history and politics.

My research and argument tackles tuberculosis in Cuba under Batista's administration, much like the historians I just previously mentioned, but through the lens of architectural history and a look at the popular social beliefs held at the time that climate and the environment played a key role in the "curing" process of tuberculosis. I use the Topes de Collantes Sanatorium in Cuba as my central case study along with other sanatoriums such as the Ottari Sanatorium in Asheville and the Paimio Sanatorium in Finland to analyze the medical practices and beliefs in regard to tuberculosis in the early to mid-twentieth century. This historical focus is important because it seeks to analyze how and why different countries, governments,

7 Argote-Freyre, "Fulgencio Batista," 15.

8 Gutiérrez, "An earnest pledge to fight tuberculosis," 281-282, 283-285.

9 Urban, "Plagued by Politics," 778-787.

architects, and medical professionals decided to tackle TB through new modern structures and an emphasis on the natural landscape. Much of the scholarship on this subject has looked at TB sanatoriums in Europe and the United States, but few have looked at sanatorium institutions in smaller countries like Cuba. Cuba also suffered greatly from TB and contributed innovative ways to minimize this disease much like other, more larger and powerful countries.

The Topes de Collantes Sanatorium and Theory of the “Climate Cure”

On February 23, 1917, John W. Trask, the Assistant Surgeon General of the United States Public Health Service at the time, published a report on the general nature of tuberculosis and its positive relation of climate to recovery.¹⁰ In this report, when describing the ideal situation and way of living for one suffering from tuberculosis, Trask stated:

To live a favorable life, consideration must be given to the diet, rest, exercise and work, recreation and amusement, and peace of mind. Under suitable environment are included the conditions which will make the living of a favorable life possible, giving due consideration to the above factors, and also to the suitability of the atmosphere or climate to promote the highest physiologic efficiency of the human machine.¹¹

This statement reflected the popular belief at the time, primarily in Europe and the United States, of the so called “climate cure.” This theory in the medical and general community centered around the idea that care for a tuberculosis patient should be focused around an environment in which he/she can be in a location that receives access to clean, fresh air, has a higher altitude, and is dry and mostly cool.¹² This was based on the reasoning that through a combination of isolation and exposure to the natural elements, one could eradicate tuberculosis faster than one who suffers tuberculosis at home surrounded by others in close quarters and without access to the clean, open air that a high-altitude environment or sanatorium could provide.

When applying this climate cure theory and characteristics of an ideal place for tuberculosis treatment, we can look at the Topes de Collantes Sanatorium in

¹⁰ Trask, “Climate and Tuberculosis,” 318-324.

¹¹ Trask, “Climate and Tuberculosis,” 318.

¹² Burt R. Shurly, “The Climatic Treatment of Tuberculosis,” *Transaction of the American Clinical and Climatological Association* 38, (1922): 22-23.

Cuba as an ideal example. Located in the middle of a nature preserve within the Escambray Mountains range, the sanatorium is surrounded by lush, tropical forests and vegetation, waterfalls and rivers, as well as walking trails and fresh, open air (refer to figure 1). The location was chosen by Batista himself and was turned into a political opportunity as Batista and his team traveled to the location on horseback where he personally selected the site where the sanatorium would be constructed.¹³ This journey along with the beginning of the sanatorium's construction served as great political propaganda for Batista's populist-centered administration to circulate and distribute among the Cuban press outlets and everyday citizens on the streets.¹⁴ It is important to note that Batista saw this project not only as a benefit for his political career domestically, but also abroad. By building this sanatorium in an environment and location that aligned with the beliefs of American medical experts such as Trask and Shurly, Batista sought to make Cuba stand out as a competitor on the world stage when it came to the climatic treatment of tuberculosis.

In regard to the physical composition and makeup of the outside and inside of the Topes de Collantes Sanatorium, it appears that expenses for the project were not an issue to Batista in building this medical institution that was intended to elevate both his and Cuba's reputation. Urban describes the design and works of the sanatorium:

The CNT designed the sanatorium to inspire awe. The structure was grandiose in its conceptualization and promised to be breathtaking in its implementation: constructed at a height of eight hundred meters above sea level, the sanatorium was set to have eight floors and a basement. Each floor was to have a dining area, an artificial pneumothorax room, and dormitories. The sanatorium would boast a modern operating room; departments for dentistry, cardiology, and gastroenterology; offices for administration, management, and accounting; a complex heating system; a solarium on the roof; an X-ray department; and a library.¹⁵

This in-depth description of what Batista, his medical team, and architects sought to include in the project reveals that the intent was to make this sanatorium the

13 Kelly Lauren Urban, "The Sick Republic: Tuberculosis, Public Health, and Politics in Cuba, 1925-1965" (PhD diss., University of Pittsburgh, 2017), 151, ProQuest Dissertations & Theses Global.

14 Urban, "The Sick Republic," 151-153.

15 Urban, "Plagued by Politics," 785.

premiere medical facility for tuberculosis in Cuba and would hopefully inspire governments and people abroad to look at for inspiration and see as an excellent example of new medical treatment for tuberculosis. It is important to note, however, that this project was not as great a success as Batista and the Cuban government intended it to be. Due to changes in government, lack of funds, time, and change in the treatment of tuberculosis, the Topes de Collantes Sanatorium was placed on the backburner for nearly seventeen years until Batista returned back onto the Cuban political scene and the sanatorium officially opened its doors, but never reached its intended potential or complete goals.¹⁶ Nonetheless, the ideas, design, and beliefs behind the Topes de Collantes Sanatorium in the beginning were positive and optimistic, intended to benefit the people of Cuba and advance the eradication of tuberculosis through a modern medical institution in the high, fresh Escambray Mountain ranges.

Through Fulgencio Batista's own writing, *The Growth and Decline of the Cuban Republic*, we are able to see a slight glimpse into his own personal views on the sanatorium and how he felt it ended up.¹⁷ In his chapter titled "The Battle Against Epidemics," we find a section about the sanatorium project titled *The Colossus of Topes de Collantes*.¹⁸ This advances the belief held that Batista never wanted to truly admit defeat or loss in regard to the demise of the Topes de Collantes Sanatorium. This section of the book, nonetheless, provides interesting data and statistics from Batista (without providing any outside sources or figures) about the government management of the site and the actual number of patients treated in the facility while it was open. For example, Batista states that from the opening of the sanatorium in 1954 until June 30, 1958 a total of 1,930 patients were formally admitted into the sanatorium, in which 1,285 of them were discharged and "cured" with only a total of 30 deaths reported.¹⁹ How accurate this information may be is uncertain, but what is most important about this work by Batista is that it reconfirms his belief in the "climate cure" for tuberculosis and that he wanted the sanatorium to function as best as possible until the very end.

¹⁶ Urban, "Plagued by Politics," 794.

¹⁷ See Fulgencio Batista, *The Growth and Decline of the Cuban Republic*, trans. Blas M. Rocafort (New York, NY: The Devin-Adair Company, 1964).

¹⁸ Batista, *Growth and Decline*, 99-101.

¹⁹ Batista, *Growth and Decline*, 100.

Similarities Between the Topes de Collantes Sanatorium & the Ottari Sanatorium

The Ottari Sanatorium in Asheville, North Carolina sits atop a hill overlooking a vast space of green grass and encompassed by trees (see figure 2). Built under the direction of the osteopathic physician William Banks Meacham, this sanatorium was designed to be “the finest sanatorium ever built.”²⁰ Constructed with no expense spared and modern, advanced equipment for the time, much like the construction of the Topes de Collantes Sanatorium, the Ottari Sanatorium intended to offer the best climatic, high-altitude, fresh-air care available for the treatment of tuberculosis. In terms of architecture and design, both Topes de Collantes and Ottari share a long, rectangular structure with multi-stories and windows that all look out in one direction. Within both sites, light and nature are the emphasis, with the actual structures being more minimalist and modern. In her work on American sanatoriums and their landscapes, McBride mentions that when the sanatorium movement began to spring up throughout the United States, there was “the belief that a hospital’s environment, both natural and landscaped, was critical to its success.”²¹ This is evident in both areas surrounding the Topes de Collantes Sanatorium in Cuba and the Ottari Sanatorium in North Carolina.

Another similarity that sanatoriums in the United States shared with sanatoriums like the Topes de Collantes Sanatorium in Cuba was the moral appeal they used to draw in attention and interest from the general public. Besides the fact that many believed that a high-altitude, fresh, and dry environment would be good for TB patients, there was also the appeal of a place away from the temptations of everyday life and a destination where one could work on oneself and one’s character.²² This was a selling point for Americans who could afford to attend these TB sanatoriums as well as for Batista who used this morality factor to boost his self-image as a politician and leader who wanted to eradicate TB on behalf of the Cuban people.

This connection and theme of using advertisements, propaganda, and personal persuasion to market tuberculosis sanatoriums to the general public becomes evident as a common practice during this period in the mid-twentieth century.

20 “Ottari Sanitarium,” National Park Service- National Register of Historic Places Travel Itinerary: Asheville, NC, accessed November 21, 2020, <https://www.nps.gov/nr/travel/asheville/ott.htm>.

21 Deborah L. McBride, “American Sanatoriums: Landscaping for Health, 1885-1945,” *Landscape Journal* 17, no. 1 (1998): 29.

22 McBride, “American Sanatoriums,” 30.

When Batista traveled to the Escambray Mountains via horseback to select the site for the Topes de Collantes Sanatorium, he did so with public interest in mind as well as what would popularly appeal to his general audience. Hence, he selected the Escambray mountains primarily because it met the criteria of the therapeutic, high-altitude curing environment.²³ This was a wise political move because Batista and his team knew that this “climate cure” theory was in vogue and that by building the sanatorium in the Escambray Mountains, it would resonate with the public and secure positive views from the press.²⁴ When William Banks Meacham was choosing where to build the Ottari Sanatorium, he selected Asheville, North Carolina because it was considered a destination health resort area where people were willing to travel to and pay good money for treatment.²⁵ As a result, Meacham went all out with construction and design, featuring the popular Spanish-mission style architecture of the time and exotic furniture and decorations, all to secure public approval and get his sanatorium on the map.²⁶

Similarities Between the Topes de Collantes Sanatorium & the Paimio Sanatorium

Nestled in the woods of Southwest Finland lies the Paimio Sanatorium (refer to figure 3). Designed by the Finnish architect Alvar Aalto, the Paimio Sanatorium is considered by many a masterpiece of modern architecture and one of Aalto’s most important institutional buildings.²⁷ Much like the Topes de Collantes Sanatorium in Cuba, there was a competition in Finland to see which design would be the model for the Paimio Sanatorium. Aalto won the competition at the young age of thirty and quickly went to work designing his plan for the tuberculosis facility. It is said of his design, ideas, and architecture for the Paimio Sanatorium:

Paimio Sanatorium has been praised for crystallising functionalistic architecture and for being a building in which Aalto developed a special architectural solution for the specific needs of a tuberculosis sanatorium, while fulfilling the general Modernist requirement of “light, air and sun” and achieving

23 Urban, “Plagued by Politics,” 785.

24 Urban, “Plagued by Politics,” 785.

25 “Ottari Sanitarium,” National Park Service, <https://www.nps.gov/nr/travel/asheville/ott.htm>.

26 “Ottari Sanitarium,” National Park Service, <https://www.nps.gov/nr/travel/asheville/ott.htm>.

27 Marianna Heikinheimo, “Architecture and technology: Alvar Aalto’s Paimio Sanatorium” (PhD diss., Aalto University, 2016), 17.

high hygiene standards that were in line with state-of-the-art tuberculosis treatment at that time.²⁸

Similar to Topes de Collantes, Aalto's idea for the space centered around a grand, yet minimalist structure that incorporated the natural landscape around the building and made light, air, and sun the focal point of each room.

The sanatorium movement that occurred throughout Europe, the United States, and Cuba (with the Topes de Collantes Sanatorium) in the early to mid-twentieth century can be traced back to the foundational principles and characteristics of modern architecture. This is important to note because all three of the TB sanatoriums discussed in this paper: Topes de Collantes, Ottari, and Paimio, share clean white lines, large windows, inclusion of nature, and focus on the human use and practicality of the space that came along with the modern architecture movement. What tuberculosis sanatoriums and modern architecture shared in common was the absence of unnecessary design features and space-fillers and the more direct focus on how humans interact with the space, live in the space, and mentally/emotionally connect with the space.

Through modern architecture's principles of practical design and the use of new materials and methods such as concrete and steel, public spaces, medical institutions, and personal spaces developed a more hygienic lifestyle.²⁹ Both the Paimio Sanatorium and the Topes de Collantes Sanatorium were built with these ideas in mind, and as a result, led to a common theme of hospital architecture that centered around the treatment of tuberculosis patients and the importance of light, air, and sun. Common features that were included in the design of tuberculosis sanatoriums included flat roofs, balconies, terraces, and plenty of glass and windows.³⁰ The Paimio Sanatorium featured all of these and the Topes de Collantes Sanatorium incorporated most of them and took a unique approach by constructing a solarium on the roof. These innovative and unique approaches to medical treatment and the caring of TB patients reveals an interesting combination of modern thought and architecture along with the basic foundation and inclusion of the natural world.

28 Heikinheimo, "Architecture and technology," 17.

29 Margaret Campbell, "What Tuberculosis did for Modernism: The Influence of a Curative Environment on Modernist Design and Architecture," *Journal of Medical History* 49, (2005): 466.

30 Campbell, "What Tuberculosis did for Modernism," 470.

Conclusion

I have argued that the Topes de Collantes Sanatorium in Cuba employed elements of modern architecture and the popular medical belief in the “climate cure” at the time in constructing a grand, modern medical institution for tuberculosis treatment in the fresh, high-altitude Escambray Mountain ranges. The Topes de Collantes Sanatorium was built at a time when the majority of the medical community in the Western hemisphere believed in treating tuberculosis through an ideal remote environment consisting of fresh, clean air, a high altitude, and plenty of sunlight. This was a view held by many physicians, such as J.W. Trask and Burt Shurly whose writings we looked at earlier, as well as by architects and governments in the United States and Europe. Batista sought to build on this and construct his own tuberculosis facility in the remote mountains of central Cuba. Although it was delayed for many years, contested by many, and never reached its optimal end-goal, the Topes de Collantes Sanatorium in Cuba had the ability to be another successful TB sanatorium like the Ottari Sanatorium in North Carolina and the Paimio Sanatorium in Finland. All three medical facilities shared a central focus on incorporating the surrounding natural landscape, using clean, minimalist architecture, and the inclusion of light, air, and freshness into the space. Each of the institutions also used advertising, press, and moral appeal to garner interest and inspire people to visit and believe in what a remote environment and clean, modern space could offer for medical treatment. This period in tuberculosis medical history offers an interesting interplay of medicine, architecture, nature, and politics, with Cuba’s Topes de Collantes Sanatorium being a prime example of this.



Figure 1: *Topes de Collantes tuberculosis sanatorium, near Trinidad, Cuba, 1954*, Photographic postcard, University of Miami Library, Cuban Photograph Collection.



Figure 2: Ewart M. Ball, *Ottari Sanatorium*, Photograph, University of North Carolina at Asheville, Photography Archives, http://foto.lib.unca.edu/findingaids/photo/ball/pages/ball_n1013.html.



Figure 3: *Paimio Sanatorium*, 1933, Photograph, Alvar Aalto Foundation, <https://www.alvaraalto.fi/en/architecture/paimio-sanatorium/>.

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